

In the United States Court of Federal Claims

No. 03-2627C

(Filed: December 15, 2015)

NOT FOR PUBLICATION

ENTERGY NUCLEAR FITZPATRICK, LLC,
ENTERGY NUCLEAR INDIAN POINT 3, LLC,
and ENTERGY NUCLEAR OPERATIONS, INC.,

Plaintiffs,

v.

THE UNITED STATES,

Defendant.

Spent Nuclear Fuel;
ISFSI; Dry fuel
storage; Standard
Contract; Damages;
Partial breach; NRC
fees.

ORDER AND FINAL JUDGMENT

On October 28, 2015, the court announced a bench ruling after trial. The parties subsequently stipulated to the correct amount of judgment due plaintiffs assuming the correctness of that ruling, and the court is now prepared to enter final judgment. The order which follows is drawn from an edited version of that bench ruling, but there are no substantive changes intended. *See* Tr., Oct. 28, 2015, ECF No. 238.

The court has already determined that the United States is liable for its breach of the Standard Contract for Disposal of Spent Nuclear Fuel. The sole purpose for trial with respect to plaintiffs' operation of the Indian Point 3 and FitzPatrick nuclear plants was the quantum of damages to which plaintiffs are entitled for the continuing partial breach. Plaintiffs claim a total of \$106,741,389 in damages incurred during the period Nov. 21, 2000 through June 30, 2013. The government does not contest \$77,970,459 of the claim, leaving in dispute approximately \$29 million. Plaintiffs are only seeking damages for the period subsequent to their acquisition of the two plants.

All of the cost claims relate to the consequences of the government's failure to commence Spent Nuclear Fuel pickup ("SNF") from FitzPatrick and

Indian Point 3 by the contractually required dates, prompting the otherwise unnecessary construction of dry a fuel storage facility at FitzPatrick and associated costs for operating that Independent Spent Fuel Storage Installation (“ISFSI”), making plant modifications, procuring dry fuel storage casks, and loading and moving the casks. Plaintiffs’ claims for Indian Point 3 relate to modifications to the existing facility to accommodate dry fuel storage, procuring storage casks and related equipment, moving the SNF from Indian Point 3 to Indian Point 2’s spent fuel pool using a shielded transfer canister (“STC”), then loading the SNF into dry storage casks, and moving them to the existing ISFSI at Indian Point.

It is undisputed that, under the applicable DOE acceptance rates, DOE would have commenced performance at FitzPatrick in 2000 and at Indian Point 3 in 2001. We accept the basic claim that, at FitzPatrick, the breach caused construction of the ISFSI, the procurement of dry storage casks, the loading of those casts from the wet pool to dry fuel storage, and, at Indian Point 3, that the breach caused plaintiffs to procure dry fuel storage casks, make an interim transfer from Indian Point 3 to Unit 2, then load those casks from the Unit 2 wet pool to dry fuel storage containers and to the Indian Point ISFSI.

There are 23 disputed items and our resolution of them listed below:

1. Upgrading the Indian Point 3 Fuel Storage Building Crane—Plaintiffs claim costs for upgrading the Indian Point 3 Fuel Storage Building Crane. The amount claimed by plaintiffs for this item is \$10,070,149 (\$10,068,838 plus the amount defendant challenges for payroll loader costs of \$1,311).

Conclusion: not recoverable

A. Stipulation 14 states that, “[i]n 1994, NYPA planned a capital project to upgrade the fuel storage crane at Indian Point 3 to be single-failure-proof. NYPA noted that the existing fuel storage building crane had insufficient lift capacity and was not single-failure-proof to safely lift spent fuel casks when shipment was required in the late 1990s.”

B. Stipulation 16 states that, “had DOE fully performed under the standard contract, NYPA would have upgraded the reactor building crane to be single-failure proof prior to the sale of the FitzPatrick plant to Entergy.”

C. The upgrade was not a result of DOE’s breach because it would

have happened in the but-for world. The fact that Entergy paid for it rather than NYPA does not make the cost attributable to the breach.

2. Loading of Holtec Dry Storage Casks—Defendant challenges certain of Entergy’s costs in loading of the Holtec dry storage casks: \$4,083,915 for loading costs at Indian Point 3 and \$2,554,157 of loading costs at FitzPatrick.

Conclusion: recoverable

A. Although little is known regarding what DOE performance will look like when it eventually happens, this should not be held against plaintiffs as a deficiency in their construction of a non-breach world. The breach makes it impossible to know what that loading campaign will look like.

i. Plaintiffs posed a number of questions aimed at this problem in their interrogatories and requests for admission. The answers they received were either insufficient to allow them to model DOE performance and compare it with their own or the answers directly support plaintiffs’ assertion that this comparison is impossible. For example:

a. In response to an interrogatory number 2, defendant states that “When the standard contract was promulgated, it was contemplated by both utilities and DOE that bare fuel assemblies would be loaded into transportation casks provided by DOE,” but went on to admit that a contract amendment will be necessary to “define the terms and conditions of acceptance for canistered fuel.”

b. In interrogatories 3 and 4, plaintiffs inquired of specifics regarding the cask DOE would have provided for transport. The extent of the answer given was that, at Indian Point 3, a legal-weight truck cask would have been “suitable for use” unless Entergy allowed for loading to intermediate transport cask for subsequent loading to a larger final transport cask; and, for FitzPatrick, DOE stated that a larger rail cask would have been suitable for use. For both locations, it was admitted that, at the time that DOE was analyzing and planning for transport at these locations, “no DOE reference cask could have been used” at either site without further

analysis, administrative revisions, and possible site modifications. Defendant summed up its answer by saying that DOE had not selected a cask for use at either site.

c. Defendant argues that this assumes that plaintiffs are relying on the government's refusal to answer interrogatories and that they should have asked the court to direct better answers. The opposite is true. Plaintiffs are relying on what defendant represented in its answers, not on the absence of answers.

B. The fact that plaintiffs will have to do a loading campaign in the future (to DOE) is no answer because we know now that plaintiffs will have had to load twice. The balance of the evidence shows that it is more likely than not that Entergy will have to re-perform these same tasks in a new loading campaign when it loads to DOE in the future.

C. The breach caused Entergy to have to load to a transport and then storage cask at least one more time than would have been the case had DOE performed. Plaintiffs would not have had to load to an ISFSI in the non-breach world. At Indian Point 3 we know that loading and unloading and reloading through the pool at Indian Point 2 is all extra work.

D. The common thread in the court's resolution of the various items is that plaintiffs can recover for those work items that we either know will be done twice or which they have shown will probably have to be done twice. If plaintiffs cannot show that for a cost item, then they cannot recover for it.

3. Part 171 Nuclear Regulatory Commission Fees—Plaintiffs claim a portion of the Part 171 U.S. Nuclear Regulatory Commission ("NRC") fees. The amount claimed by plaintiffs for these fees is \$3,866,070. **Conclusion: not recoverable**

A. The testimony of Mr. Funches was relevant, reliable and admissible, but his testimony did not sufficiently link the increase in fees to the breach, i.e., Entergy did not establish an incremental increase attributable to the breach. Mr. Funches did not establish the damages with reasonable certainty.

B. Before the rule change: the fee did not apply unless the plant used dry storage. After the rule change: all utilities paying Part 171 fees have to pay dry storage fees.

C. Even though the Statement in the Federal Register is presumed to be the best evidence of the actual reason for the change in 171 fees, namely to induce utilities to use dry storage facilities and to recover all of the NRC's decommissioning licensing costs, in principal, I can accept the notion that, the breach will lead to more dry fuel storage, and more dry fuel store will lead to more regulatory oversight and more cost to the agency, which is legally obligated to recover most of the cost from the utilities. So generally, there is evidence of causation.

D. But, everyone storing fuel (both wet and dry) on site paid the fee post-fee structure change. By definition, therefore, there cannot be a 1:1 correspondence between the breach and the fee, which is not calculated based on volume of storage at a particular site. Plaintiffs are in no different position than utilities that had no dry storage.

E. Thus the actual metric that Mr. Funches used does not correspond in any way to the particulars of plaintiffs' experience of the breach. In other words, if plaintiffs had less dry storage, they would not have experienced a different fee, and vice versa. There is insufficient linkage between the cost claimed and the breach.

4. Estimated Security Costs at Indian Point 3—Plaintiffs claim the estimated cost of manning two additional Bullet Resistant Enclosures ("BREs") at Indian Point 3 near the ISFSI. Plaintiffs claim \$2,538,576 for its estimated cost of manning the two BREs. **Conclusion: not recoverable**

A. In principal, once again, I can accept the idea that having two more BREs to man should lead to higher staffing costs, but plaintiffs' calculation of additional costs based on full-time equivalents did not establish an incremental increase in actual security staffing and thus actual costs incurred due to the breach. It was simply assumed.

B. There was no evidence of either an uptick in security staffing when the two addition BREs went online or evidence of actual 24/7 staffing of those posts.

C. The testimony of Mr. Gagnon that this lack of an uptick in staffing

was due to the natural ebb and flow of security staffing at such a large facility does not explain the lack of proof, and plaintiffs have not claimed lost opportunity costs. The claim fails for lack of proof.

5. Disposal of Radioactively Contaminated Soil at Indian Point 3—Plaintiffs claim costs for excavating and disposing of radioactively contaminated soil at Indian Point 3. The amount claimed by plaintiffs for this item is \$2,443,947.

Conclusion: not recoverable

A. Plaintiffs had to improve the haul path in order to move the massive HI-TRAC containing the spent fuel, and, in doing so, had to remove some contaminated soil that they found. The testimony that Entergy would have to remove the contamination at decommissioning, however, was uncontroverted, and thus this cost would have been incurred in the non-breach world.

B. The suggestion that the half-life of the radioactive isotopes might have been exceeded within anything other than geological time was speculation; no expert opined that this would be the case.

6. South Security Fence Costs at Indian Point 3—Plaintiffs claim a portion of the costs associated with moving the south security fence at Indian Point 3. The amount for this claim is \$1,887,250. **Conclusion: not recoverable**

A. The Project Manager, Mr. DeFrancesco had previously suggested moving the entire fence, but it was not done earlier, in his own words, “because he could not make the business case for it.”

B. He testified that the fence project was done in order to expand the exclusion zone, which alleviated certain political concerns unrelated to the breach. Nor was the desire to move the intrusion detection system further out related to the breach.

C. Mr. Gagnon also testified that it was unnecessary to move the fence for loading to the ISFSI because the HI-TRAC could have been moved in and out of the gates between facilities.

D. Mr. Hinrichs testified that, after the fact, he estimated that 10 percent of the project was attributable to dry storage project and then selected an assortment of work orders that would equal to 10 percent of the total cost. Plaintiffs failed to make the requisite showings that this

part of the project was a result of the breach and that the way they calculated damages was anything other than a guess.

7. Repair of Certain Indian Point 3 Fuel Assemblies—Plaintiffs claim costs for repairing defects in certain Indian Point 3 fuel assemblies manufactured by Westinghouse. The amount claimed by plaintiffs for this item is \$1,677,914 (\$1,509,042 plus amounts defendant challenges for unsupported costs of \$168,820 and payroll loader costs of \$52). **Conclusion: not recoverable**

A. The top band of these type of Westinghouse fuel assemblies was corroding due to a faulty selection of materials. DOE's breach was completely unrelated to the design failure of these fuel assemblies.

B. There is no dispute that this repair would have to be done some time in the future in order to move these assemblies.

C. Further, because of stipulation 9, which assumes the 1987 ACR pick up rates, and PX 128 (which uses that in its modeling), Entergy would have had to do this repair itself in order to load to DOE beginning in 2001. Only if Entergy were to delay pick up by swapping rights, which it alleges in the not-admitted Waterford model, would Entergy be able to claim that it wouldn't have had to do this repair during the damages period.

8. Materials Loaders on Unclaimed Items and Items Missing Loader Rate Support—Defendant challenges plaintiffs' entitlement to loaders applied to work items that Entergy no longer claims in this lawsuit. Defendant also challenges the loader rates applied to certain costs incurred during the period immediately after the sale of Indian Point 3 by NYPA to Entergy as insufficiently supported. The total challenged for these two items combined is \$1,150,325. **Conclusion: \$730,000 is recoverable; \$420,000 is not recoverable.**

A. As to the approximately \$420,000 relating to items reversed out of the claim, Mr. Peterson's was the only direct testimony on the subject. His testimony was uncontroverted that, although plaintiffs properly excluded the cost of certain materials, it failed to also remove from the claim the associated materials loaders. Materials loaders applied to cost items not claimed are not chargeable to the government as damages.

B. As to the \$730k challenged by Mr. Peterson because he could not

compute the effective rate, defendant failed to rebut the testimony of Ms. Curran as to how those costs were booked and how the loaders were calculated and applied. Given the circumstances in the changeover from NYPA to Entergy, we see no reason to question the accounting method used by Entergy.

9. Analysis of and Modifications to the Fuel Storage Building at Indian Point 3—Plaintiffs claim costs for the analysis of and modifications to the Fuel Storage Building at Indian Point 3. The total amount claimed by plaintiffs for these four separate items is \$1,093,540. **Conclusion: lead paint abatement, duct removal, and floor resurfacing are recoverable. Load analysis is not recoverable.**

A. The work was necessary to facilitate moving fuel in the HI-TRAC from Indian Point 3 to Indian Point 2. By contract, the DOE cask had to be suitable to use without further building modifications.

B. These items were addressed by Mssrs. DeFrancesco and Skonieczny. Plaintiffs' general argument is that the standard K required the cask to be "suitable for use" and thus improvements/adaptations to buildings would not have been necessary if DOE had performed. Defendant's response is that plaintiffs have not modeled the non-breach performance and so they have not proven what modifications would or would not have been necessary in the non-breach world.

i. Lead paint abatement: yes

a. Lead paint had to be removed from the Indian Point 3 crane bridge for welding on lift attachments.

b. Mr. Brewer testified for the government that this would have been necessary at decommissioning, but did no specific modeling of that or further investigation into the issue.

c. Mr. Skonieczny testified that slings would have been used at decommissioning and therefore that the lead paint could have been left undisturbed.

d. Mr. Skonieczny's testimony on the issue was more helpful to the court than Mr. Brewer's general assertion

as to decommissioning. Thus we find that it was more likely than not that lead abatement was caused by the breach and does not replicate work that would have occurred in the non-breach world.

ii. Ventilation duct removal: yes

a. Plaintiffs proved that it was more likely than not that the STC and HI-TRAC were heavier and taller than the cask that DOE would have brought to Indian Point 3.

b. The ventilation duct removal was necessary to raise the door to accommodate the larger cask.

iii. Floor resurfacing: yes

a. The floor was not level enough for use with air pads, which were necessary given the weight of the fully loaded Hi-Trak.

iv. Load analysis: no

a. I am prepared to assume that DOE would have had to use a smaller cask to load in the Indian Point 3 fuel building, but plaintiffs failed to establish that a load analysis would **not** have been necessary to load even a DOE transport cask.

10. Indian Point 3 Fuel Characterization—Plaintiffs claim the costs of fuel characterization. The amount claimed by plaintiffs for this item is \$761,021, which consists of \$272,160 for the fuel inspection and characterization report, \$58,310 for debris removal, and \$430,551 for Westinghouse fuel characterization activities. **Conclusion: recoverable**

A. DOE's delay caused Entergy to characterize the fuel in order to move it to the ISFSI.

B. Although this would have been necessary in order to load to DOE, the delay in pickup has caused Entergy to have to perform the characterization one additional time that it would not have had to incur had DOE performed. The evidence is clear that the odds are

overwhelming that the fuel will have to come off of the ISFSI, out of the storage containers, and then go back into the pools.

11. FitzPatrick 2013 Loading Delay—Plaintiffs claim costs associated with the 2013 FitzPatrick loading delay. The amount claimed by plaintiffs for this item is \$650,521 (\$613,943 plus amounts defendant challenges for unsupported costs of \$36,241 and payroll loader costs of \$336). **Conclusion: not recoverable.**

A. These are costs are associated with preparations for the 2013 loading campaign. They were incurred twice because plaintiffs started, stopped, then started again. Plaintiffs had to stop and do a new seismic analysis prompted by the Perry Plant incident.

B. Although Entergy would not have had to load to the ISFSI in 2013 but for the breach, plaintiffs incurred extra costs as a result of its own negligence in ignoring known risks after the incident in 2011 at the Perry plant.

C. DOE's breach did not cause plaintiffs to undergo the preparatory activities for the 2013 loading campaign twice. Plaintiffs simply failed to mitigate its damages in this regard.

12. Transactions allegedly missing documentation—Defendant challenges a number of items included in Mr. Metcalfe's spreadsheets as insufficiently documented. These are primarily cost items related to contracts and work orders for materials and services performed by third parties. Defendant proposes a \$464,593 reduction in the claim for Indian Point 3 and a reduction of \$137,589 in the claim for FitzPatrick. **Conclusion: recoverable**

A. Mr. Metcalfe persuaded us that although some documentation was missing in comparison to other claimed costs, these costs were associated with the dry storage project. This was further supported by some of the fact witnesses who gave specific testimony as to some of these specific costs having been incurred and, in general, the discipline of booking costs to the project.

B. Mr. Peterson's testimony was insufficient to rebut Mr. Metcalfe because he could only cast doubt based on his own personal belief regarding sufficient proof for a cost. Mr. Peterson was unable to say "here is why these costs weren't actually incurred as part of the cask

loading or ISFSI storage.” Nor was Mr. Peterson applying any objective accounting standard, such as GAAP, FERC, etc.

13. Materials Loaders for Indian Point 3 HI-TRAC and FitzPatrick calculations and repairs—Defendant challenges the application of a materials handling loader to three items claimed by plaintiffs: (1) the Indian Point 3 HI-TRAC cask and (2) Holtec turnkey contract for repair of the lifting brackets at FitzPatrick; and (3) Holtec analysis or performed in support of the cask loading at FitzPatrick. The challenged costs amount to \$419,100 for the materials loader applied to the Indian Point 3 HI-TRAC and \$12,176 for the analysis at FitzPatrick (\$5,129.73 for the loader applied to the repair contract and \$7,046.16 for the Holtec analysis). **Conclusion: HI-TRAC loader is not recoverable; FitzPatrick bracket repair contract is not recoverable; FitzPatrick Holtec analysis is recoverable.**

A. As to the \$5,000 for the Holtec bracket repair at FitzPatrick, Mr. Peterson’s testimony that this was the result of the improper use of a purchase order rather than a contract order was uncontroverted. This was a turnkey contract and does not appear to bear any relation to the warehousing and inventory associated with a materials handling loader.

B. As to the \$7k loader applied to the Holtec analysis work, there was testimony that the resulting report was delivered in hard copy format by Fed Ex and came through the warehouse. Thus a materials loader was properly applied.

C. As to the \$419,000 for the HI-TRAC cask, the contract called for a zero dollar contract order to be used. Instead, Entergy elected to use a purchase order and applied a materials loader.

i. The HI-TRAC neither came through the warehouse nor was it ordered/procured by Indian Point 3 personnel. It was ordered by Entergy corporate and was part of a turnkey contract.

ii. The materials loader was thus improperly applied to this item and is not chargeable to the government as a result of the breach. Treating this as eligible for a percentage markup related to costs for materials handling bears no correspondence to reality.

14. Procurement of Work Platforms at FitzPatrick and Indian Point 3—Plaintiffs claim costs for procuring work platforms at FitzPatrick and Indian

Point 3. The amount claimed by plaintiffs for this item is \$330,209, which consists of \$183,384 for the platform at FitzPatrick and \$146,825 for the platforms at Indian Point 3. **Conclusion: not recoverable.**

A. The reasons for installing work platforms at both plants is the same in both worlds, which is to the say that the impetus for Entergy performing this upgrade was not DOE's breach.

B. It is undisputed that access to the top and sides of the casks is necessary and made easier by a work platform whether the cask is bolted or welded, and these platforms have continuing utility. Scaffolding, on the other hand, would have had to be assembled and disassembled repeatedly.

C. The court is persuaded that this would have been done in the non-breach world, and in any event was useful irrespective of the breach so that charging the government for 100 percent of the cost would be improper.

15. Expedited Delivery Fees—Plaintiffs claim costs for fees paid to Holtec to expedite delivery of storage casks. The amount claimed by plaintiffs for these fees is \$226,400. **Conclusion: not recoverable.**

A. Plaintiffs argue that only reasonable mitigation is required, not perfect mitigation. But this is an instance of a complete failure to mitigate.

B. These fees were not incurred as a result of DOE's breach because it was Entergy's own decision to give its casks at Indian Point 3 to be used at Indian Point 2 in 2012 for loading not at issue here.

C. Had Entergy not voluntarily used the Indian Point 3 casks at Indian Point 2, it would not have had to procure those casks for Indian Point 3 in 2013 and incur the rush delivery fee that Holtec was charging at that time.

16. Payroll Loaders (Resource Codes 19 and 60)—Defendant challenges the recoverability of payroll loaders using these resource codes. The amount disputed by defendant for this item is \$123,701, which consists of \$88,388 from Resource Code 19 and \$35,313 from Resource Code 60. **Conclusion: recoverable.**

A. Defendant argues that stock options are only given to high level executives who do not work at either plant, and the costs incurred by Entergy for stock options fluctuate for reasons unrelated to the breach. Therefore, they do not bear any connection to costs incurred as a result of the breach and dry storage loading.

B. Defendant argues that retiree costs similarly reflect costs actually incurred before the breach and are thus not recoverable.

C. Ms. Heard established the regular practice of allocating these costs (stock options and retirement costs) to projects. Entergy did nothing out of the ordinary in applying resource codes 19 and 60 to cost items incurred as a result of the breach.

D. No government witness addressed these costs as violating any objective accounting standard.

E. The law will not require Entergy to invent an entirely new accounting system for purposes of this lawsuit in order to further subdivide its cost allocation system to an even more granular level than it already is. Unlike the materials loader I disallowed earlier, there is no question here that plaintiffs actually incurred these costs. It is simply a question of allocation. Asking them to create a new accounting system which eliminates them from this claim distorts their ability to recover the costs consistently with their pre-existing accounting system.

17. FitzPatrick Replacement Lifting Device Bolts—Plaintiffs claim the cost of replacement lifting device bolts at FitzPatrick. The amount claimed by plaintiffs for this item is \$89,150. **Conclusion: not recoverable.**

A. 1. The breach did not cause plaintiffs to lose the lifting device bolts. Failure to mitigate.

18. Membership Fees and Conferences—Plaintiffs claim membership fees in the Holtec User Group and the cost to attend conferences related to that membership. The amount claimed by plaintiffs for this item is \$41,082. **Conclusion: recoverable.**

A. Plaintiffs were reasonable in selecting Holtec as their cask vendor for ISFSI loading and storage.

B. Plaintiffs' witnesses were uniform and uncontroverted in testifying that the Holtec User Group was of great assistance in using these casks and that one would not want to use the casks without being a member of the group and the associated industry knowledge that came with it.

C. This is a reasonable cost incurred due to the breach.

19. FitzPatrick Internal Labor Missing Name and Hour Detail—Defendant challenges some of the hours claimed for FitzPatrick internal labor as insufficiently supported by documentation because certain line items are missing names of employees or hourly rates associated with them. The total for this challenge is \$435,540. **Conclusion: recoverable.**

1. Project Managers Phy and Pickett testified that labor was tracked very carefully on all of these projects, and that comports with the records that we saw at trial.

2. Mr. Metcalfe testified that he had a high degree of confidence in the accounting of these costs and inclusion in the claim.

3. Mr. Peterson, in contrast, only stated that he "had concerns."

20. Modifications to the Fuel Handling Machine at FitzPatrick—Plaintiffs claim costs of modifications to the fuel handling machine at FitzPatrick. The amount claimed by plaintiffs for this item is \$27,307. **Conclusion: not recoverable.**

A. The FitzPatrick fuel handling machine had to be modified to increase its height limit. It was designed to be used with the IF300 cask, the only cask posited by any witness known to exist that would have worked with the machine.

B. All casks in existence at the time would have required this same modification. FitzPatrick was designed to handle a large cask, unlike the Indian Point 3 unit, and it is more likely than not that DOE would have used a larger cask to pick up fuel from FitzPatrick. It is thus more likely than not that plaintiffs would have had to perform this modification in the non-breach world.

C. This modification will only have to be performed once, not twice like loading costs.

21. Certain Labor Provided by DP Engineering—Plaintiffs claim costs for labor DP Engineering provided for refueling outage support at Indian Point. The amount claimed by plaintiffs for this item is \$12,420. **Conclusion: recoverable.**

A. Defendant challenges these civil engineering costs as possibly unrelated to the cask loading and dry storage.

B. Plaintiffs demonstrated that it was routine to use civil engineering support for wet fuel transfers at Indian Point 3 and that this was in support of dry storage.

C. Given what we know about what was necessary in order to load the fuel to the ISFSI, it is more likely than not that these civil engineering costs were associated with dry storage. There is no question that the costs were incurred.

22. FitzPatrick Procurement of Mating Device Bolts—Plaintiffs claim costs for the procurement of mating device bolts at FitzPatrick. The amount claimed by plaintiffs for this item is \$11,628. **Conclusion: not recoverable.**

A. Plaintiffs presented no evidence why the breach necessitated it to procure extra bolts.

B. Testimony was uncontroverted that it is not Entergy's practice at FitzPatrick to procure extra bolts like these, and it was more likely just a mistake. This is thus not a cost attributable to the breach.

23. Repair of the Indian Point 2 Fuel Handling Machine—Plaintiffs claim the costs of repair of the fuel handling machine used to handle fuel in the Indian Point 2 fuel pool. The amount claimed by plaintiffs for this item is \$10,747. **Conclusion: not recoverable.**

A. This is the Fuel Handling Machine at Indian Point2, the intermediate stop for spent fuel between Indian Point 3 and the ISFSI.

B. Plaintiffs argue that the anticipated extra wear and tear associated with loading to the ISFI made this repair necessary, but the computer actually failed prior to the movement of fuel from Indian Point 3 to Indian Point 2 as part of the dry storage campaign.

C. Even if that were not the case, Entergy would have had to use this machine to load to DOE in the non-breach world, and the wear and tear would have accumulated then and necessitated the fix.

D. The conclusion is that this repair would have been necessary in the non-breach world as well.

In sum, the court finds that, with respect to the items held to be “recoverable,” plaintiffs proved that they were (1) reasonably foreseeable by government in the event of breach; (2) that the breach was a substantial factor in causing them, and that (3) plaintiffs have proven the amount of the damages with reasonable certainty.

The parties have agreed that, in light of these rulings, plaintiffs are entitled to judgment in the amount of \$80,876,013. *See* Joint Status Report, Nov. 19, 2015, ECF No. 239. Accordingly, the Clerk is directed to enter final judgment for plaintiffs in the amount of \$80,876,013. No costs.

s/Eric G. Bruggink
ERIC G. BRUGGINK
Judge